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A CASE REPORT OF FIBROTHECOMA

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Abstract : Ovarian fibrothecomas comprise a spectrum of ovarian sex cord stromal tumours where there are components of both an ovarian fibroma and an ovarian thecoma. They account for 3-4 percentage of all ovarian tumours and 90 percentage are unilateral. Ovarian fibrothecomas are uncommon tumours of gonadal stromal cell origin. Mostly it occurs in post menopausal age group with features of metorrhagia. Here, we describe a rare case of a unilateral ovarian fibrothecoma in a perimenopausal woman who presented with a large pelvic mass. A 38 year old (P2L2) woman came with complaints of abdominal distension with loss of weight and appetite with no menstrual disturbances. On examination there was a large pelvic mass of 24 X 24 cm size. CA 125 was mildly elevated and CT abdomen shows adnexal mass with ascites. In view of features of malignant ovarian mass staging laparotomy was planned and preceded to total abdominal hysterectomy and bilateral salphingo-oopherectomy was done. Histopathological examination revealed that it was fibrothecoma surprisingly. Although rare, ovarian fibrothecoma should be considered in patients presenting with a large pelvic mass in perimenopausal age group. Radical surgery is the preferred management strategy for perimenopausal women with ovarian fibrothecomas and is associated with a good prognosis.

Keyword : Ovarian fibrothecoma, Pelvic mass, Perimenopausal, Laparotomy

INTRODUCTION

Sex cord-stromal tumours are a distinct group of ovarian tumours representing approximately 8% of all ovarian neoplasms. These tumours are of gonadal cell types which are derived from the coelomic epithelium or the mesenchymal cells of the embryonic gonads. The most common types are granulosa cell tumours, fibrothecomas and Sertoli-Leydig cell tumours.1These tumors affect all age groups and in 70% of the cases are diagnosed as having stage I lesions at presentation, contrary to the epithelial ovarian tumours where patients present with stage III or IV disease.2 Surgical resection is the preferred treatment for sex cord-stromal tumours and is generally associated with a good prognosis.2 Here, we describe a rare case of a unilateral ovarian fibrothecoma in a perimenopausal woman who presented with a large pelvic mass.

CASE REPORT

A 38 years old lady came with the complaints of abdominal distension for 3 months. History of lower abdominal pain, loss of appetite and weight were present. No H/O menstrual disturbances, white discharge per-vaginum or bladder and bowel disturbances .Obstetric H/O –P2L2, both full term normal delivery, sterilised ,last child birth- 20 years. No family H/O ovarian and breast malignancies were noted.

On examination- Patient was mildly anaemic, not jaundiced, no generalised lymphadenopathy. Breast, thyroid and spine were normal. Vitals were stable. Per abdomen examination reveals mass of 24 X 24 cm in size, mobile, variable in consistency, not tender, lower border was not made out, fluid thrill absent, shifting dullness absent. Cervix appeared healthy on per-speculam examination. Per vaginal examination showed mid positioned cervix, uterus could not be made out separately and same mass felt through all fornices. Per rectal examination- same mass felt in Pouch of Douglas (POD) and rectal mucosa free.

Investigations- Hb-9.2gms%; platelets-2.10 lakhs/Cumm; Renal Function Test and Liver Function Test- Normal; CA 125-40.15 IU/L, Colposcopy-No aceto-white or iodine negative areas.

USG pelvis- Large solid mass with cystic changes, almost occupying whole of abdomen; uterus –normal; ovaries- not separately visualised; liver, gallbladder, spleen, pancreas, both kidneysnormal. Impression was given as large retroperitoneal mass.

CT abdomen and pelvis revealed features suggestive of adnexal mass lesion extending into abdomen with minimal ascites.

Surgical oncologist opinion- Per abdomen- A large pelvic mass of variable consistency was palpable in all quadrants of abdomen. They advised laparotomy and excision of mass.

Laparotomy findings- Under general anaesthesia abdomen opened by midline incision, ascitic fluid was aspirated from the peritoneum. There was a mass arising from right ovary of 20 X

20 X 15 cms was found. Left ovary and uterus were normal. Right ovarian mass was removed(Figure.1) followed by total abdominal hysterectomy and bilateral salphingo-oopherectomy. Omental and peritoneal biopsy were taken. The patient had an uneventful post operative period and recovered well. Patient was asymptomatic after 6 months of surgery.

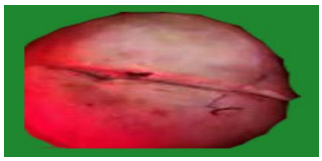

Fig 1: Post operative picture showing fibrothecoma

HPE Report- Ascitic fluid:sparsely cellular smear shows reactive mesothelial cells in a proteinaceous and haemorrhagic background, impression-reactive effusion. Uterus: endometrial glands in secretary phase, cervix – chronic nonspecific cervicitis, one ovary shows follicular cyst, section from ovarian mass shows features of fibrothecoma(Figure.2&3). Tubes: chronic nonspecific salphingitis. Omentum: mature fatty tissue with few congested blood vessels, Peritoneum: haemorrhagic infiltration by acute fatty liver cells.

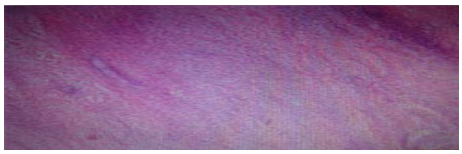

Fig 2. Histology of fibrothecoma1

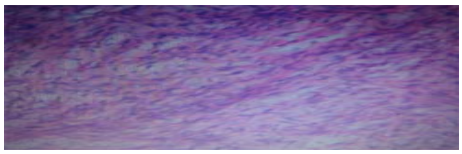

Fig 3. Histology of fibrothecoma 2

DISCUSSION

Ovarian Fibrothecomas are uncommon tumours of gonadal stromal cell origin accounting for 3-4 % of all ovarian tumours.3,4 They are rarely malignant5,6 and in 90% of the cases are unilateral.4 Ovarian fibrothecomas are composed of an admixture of fibrous and thecomatous elements.7 Histologically, these tumours are characterized by the presence of spindle, oval or round cells forming various amounts of collagen5 and also contain a smaller population of theca cells that contain intracellular lipid.3 In large fibrothecomas edema and cystic degeration are common but calcification and haemorrhage occurs very rarely.3,5 On macroscopic examination the tumour has a white whorled appearance closely resembles uterine leiomyomas.3 The tumour may be spherical or lobulated and is covered by intact ovarian mucosa.8 Fibrothecomas occur predominately in older postmenopausal women.4 They may be associated with Meigs syndrome, characterized by the presence of hydrothorax and ascites8 and elevated CA 125 levels.7 Clinical presentation is often non specific8 while patients most commonly present with a pelvic mass, metrorrhagia and pelvic pain.9 Torsion is not an uncommon presentation occurring in 8% of the patients. Endocrine manifestations due to hormonally active tumors are rare.4 In case the fibrothecoma displays estrogenic activity, associated uterine changes such as uterine enlargement and endometrial thickening may be demonstrated mainly on Magnetic Resonance Imaging (MRI) imaging.5,8 On CT scan, ovarian fibrothecomas may appear as a homogenous solid tumour with varying degrees of enhancement.10 In 79% of the cases the tumour appears as a solid mass with delayed accumulation of contrast medium, while in 21% of the cases the tumour is partly or mainly cystic thus making differential diagnosis from other ovarian masses, such as serous cystadenofibromas or even malignant tumours, difficult.9 The absence of arterial vessels and the absence or slight early uptake of contrast enhancement are characteristic signs and may be useful in considering the diagnosis of a fibrothecoma preoperatively.9 On MRI, fibrothecomas typically show predominantly low signal intensity on T2-weighted images.3 Differential diagnosis of fibrothecomas includes pedunculated and intraligamentous leiomyomas and other solid ovarian masses such as Brenner tumours, granulosa cell tumours and dysgerminomas. 3,5,8 In the presence of extensive cystic degeneration, the fibrothecoma can be easily mistaken for a malignant ovarian tumour.8 Thus, an accurate preoperative diagnosis by MRI may prevent an excessive surgical intervention. The characteristic feature of fibrothecoma with extensive cystic degeneration on MRI imaging is the presence of a solid portion that exhibits distinct low signal intensity on both T-1 and T-2 weighted images and slight enhancement on post contrast enhanced images.8 Early diagnosis and surgical resection is the treatment of choice for ovarian fibrothecomas.10 Tumourectomy is indicated for young patients while radical surgery in terms of bilateral salpingooophorectomy is indicated for perimenopausal and postmenopausal patients.4 We present this case because of unusual presentation of fibrothecoma in a perimenopausal woman with no menstrual disturbances, large pelvic mass with mildly elevated CA 125 with ascites mimicking like a malignant ovarian tumour. Though fibrothecomas are mostly a disease of post menopausal age group it should be considered in perimenopausal woman also .Radical surgery is the mainstay of treatment and is always associated with good prognosis.

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